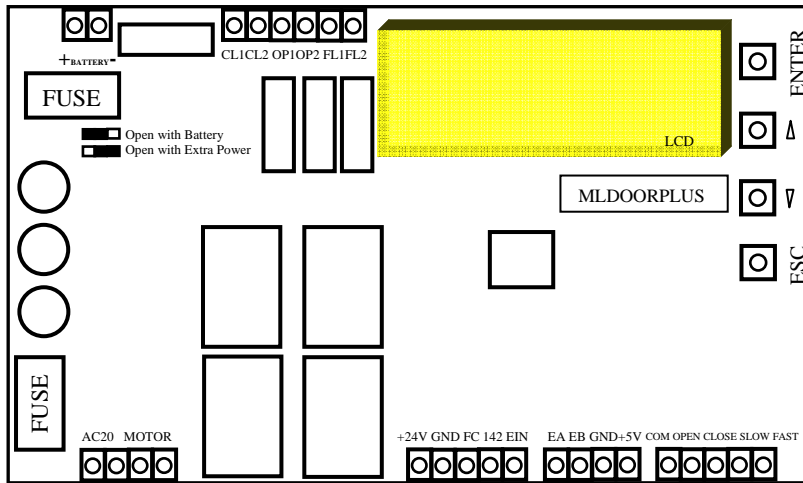


# MLDOORPLUS AUTOMATIC DOOR CONTROL CARD



## TERMINAL EXPLANATIONS

AC20	Transformer Input (Motor power+10W)
MOTOR	24 V DC Motor
+24V	24V internal supply for input signals (+) pin
GND	24V internal supply for input signals (-) pin
FC	Photocell signal input
142	Floor level signal input
EIN	Reserved input
EA	Encoder A Channel
EB	Encoder B Channel
GND	Encoder supply (-)
+5V	Encoder supply (+)
COM	Common for speed signals
OPEN	Open signal input
CLOSE	Close signal input
SLOW	Slow close signal (Nudging) input
FAST	Fast signal input
AKU +	Battery (+) (2 qty. 12V/1.2 Ah dry battery)
AKU -	Battery (-)
CL1	Door closed relay common
CL2	Door closed relay NO contact
OP1	Door open relay common
OP2	Door open relay NO contact
FL1	Fault and photocell detect relay common
FL2	Fault and photocell detect relay NO contact

## USAGE INFORMATION

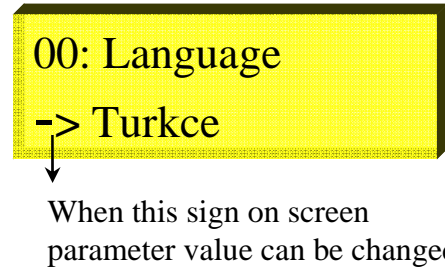
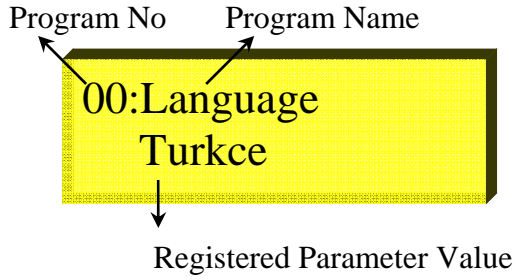
- Door situation informations are shown upper line of LCD screen. Door speed is screened at left side of bottom line ( $V=XX\text{cm/s}$ ) and position information at right side ( $P=XXX\text{cm}$ ).
- When the first power ON, the door is moved in the direction of opening if there is not "CLOSE" input and it is moved in the direction of closing if there is "CLOSE" input with teaching speed. At this operation moment, because of missing door location, "---" is screened on LCD.
- Pressing ENTER on board, it is taken to "Inspection" mode. At this moment, the door is stable. It is provided to do the mechanical adjustments without cutting the power by operator. At this moment some functions are assigned to ENTER, UP, DOWN buttons. This functions are described below. To exit "Inspection" mode, must be pressed ESC button.
- Pressing ESC button on board, it is taken to "Manual Movement" mode. At this moment, it is moved in direction of door closing by pressing UP button, it is moved in direction of door opening by pressing DOWN button. To exit "Manual Movement" must be pressed ENTER button.

## INSPECTION MODE KEY DEFINITIONS

ENTER	= By pressing this button during 2 sec., it is started programming mode.
UP	= By pressing this button, Total Run number is screened on LCD during 5 sec.
DOWN	= By pressing this button, door lenght "Teaching" is started. Door is opened with teaching speed first. Then, it is closed with teaching speed. While teaching operation, detected encoder value is screened on upper right side of LCD.
ESC	= By pressing this button, it is exit from "Inspection".

## PROGRAMMING (Ver:1.01)

- To programming of MLDOORPLUS card, by pressing ENTER button it is taken to Inspection mode first. At this mode, by pressing ENTER button again, it is started programming.



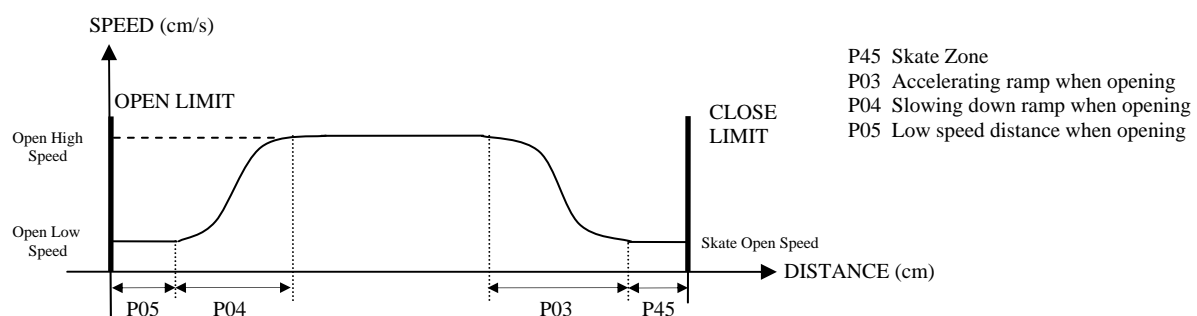
- You can choose any program by using UP and DOWN buttons.
- To exit programming mode, ESC button is pressed in main menu,  
"Exit ->ENTER"  
"Return ->ESC"  
is screened on LCD. When pressed ENTER button, it is exit from programming mode, and by pressing ESC button, it is returned to first menu which is operated.
- When ENTER button in the main menu is pressed, the program on the screen starts.
- If the program has parameter, an arrow appears at the beginning of the second line of LCD screen. You can change the parameter value by using UP and DOWN buttons. To store the value, press the ENTER button and return the main menu. By pressing the ESC button the registered value is valid and you can return the main menu.

Program	Factory Settings	Parameters / Explanations
00:Language	Turkce	Turkce - English
01:OpenHighSpeed	35 cm/s	20-50 (High speed when opening)
02:Open LowSpeed	5 cm/s	2-19 (Low speed when opening)
03:Op.Accelerate	20 cm	5-90 (Accelerating ramp adjustment when opening)
04:Open Slowing	20 cm	5-90 (Slowing down ramp adjustment when opening)
05:OpenLowS.Zone	2 cm	1-99 (Low speed movement distance when opening)
06:Op.Pres.Level	25	10-45 (Pressure level adjustment when opening)
07:Cl.High Speed	25 cm/s	20-40 (High speed when closing)
08:CloseLowSpeed	5 cm/s	2-19 (Low speed when closing)
09:Cl.Accelerate	20 cm	5-90 (Accelerating ramp adjustment when closing)
10:Close Slowing	20 cm	5-90 (Slowing down ramp adjustment when closing)
11:Cl.Low S.Zone	2 cm	1-99 (Low speed movement distance when closing)
12:Cl.Pres.Level	25	10-45 (Pressure level adjustment when closing)

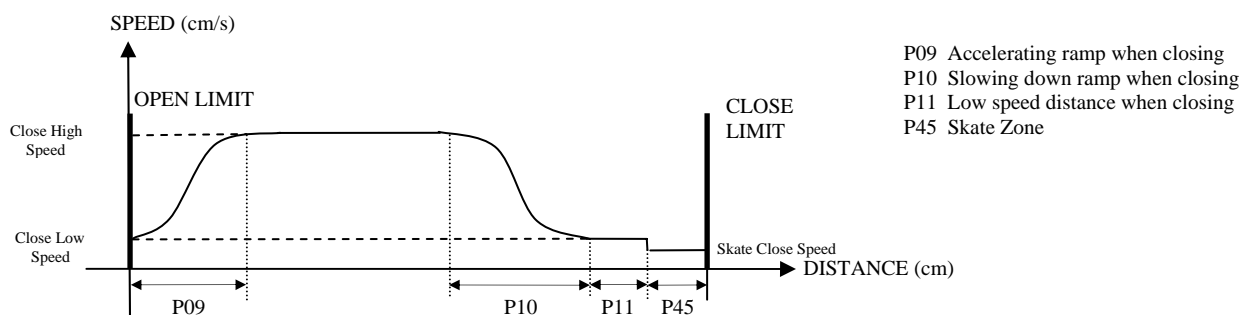
13:Run InputType	Open - Close	Open - Close, Close (Working the door with “Open – Close” or only “Close”)
14:Limit Relays	Open Contact	Open Contact,Close Contact (Chosing contact of Limit relays)
15:PressureRelay	Open Contact	Open Contact,Close Contact (Chosing fault relay contact which activated when detected pressure or photocell)
16:142 Function	Passive	Passive,Open At Floor,ClosedAtFloor (Chosing rescue mode with at floor signal action when selected “Open with Battery”. When there is “Open with Battery” situation, these situations are applied by looking this parameter: Passive :Door is opened without looking 142 input Open At Floor :Door is not open if there is 142input, if there is not, it is opened Close At Floor :Door is not opened if there is not 142 input, if there is, it is opened)
17:Rescue Mode	Open&Battery	Open&Battery, Open&Ext.Pow. (Chosing rescue mode)
18:Demo Mode	Passive	Iptal,01s – 30s (If the value is passive, there is no demo.It is always provided the door working at waiting door open and close during the value of selected second without noticing door open-close signal)
19:SetUserPassw.		(Changing user password)
20:CanselU.Pass?		(Canceling the password with changing 0000)
Manufact.Setting		CAUTION! Door manufacturer can be reach these parameters.
99:Factory Set ?		(All parameter values are changed into factory settings)

## TRAVEL CURVES

### OPENING

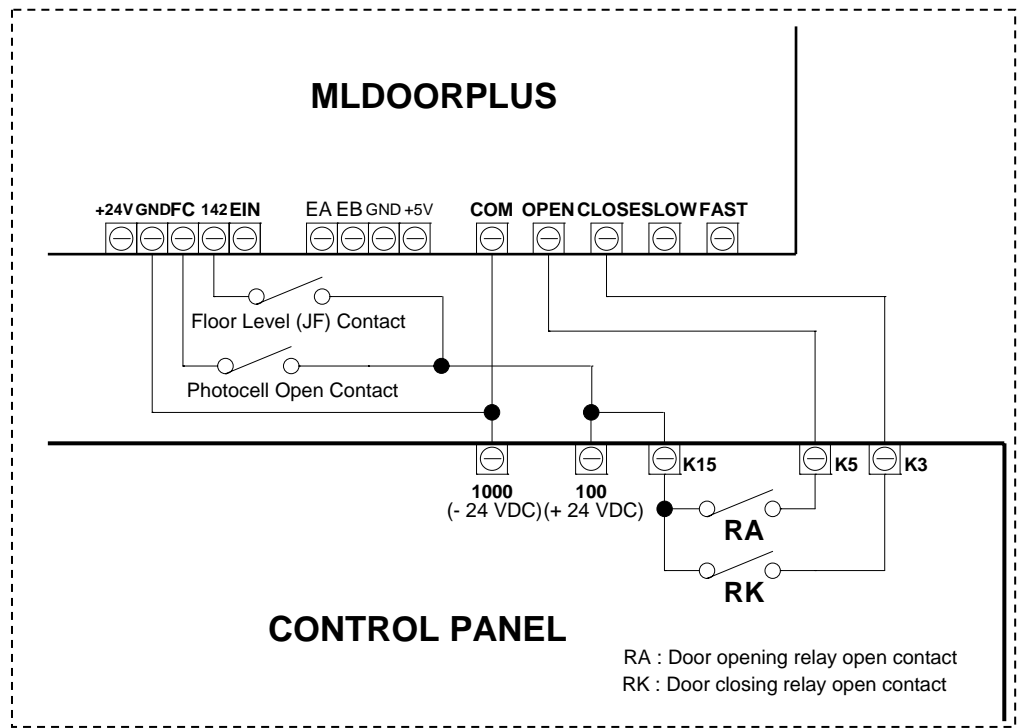


### CLOSING



**MLDOORPLUS CARD CONNECTION TO LIFT CONTROL SYSTEM**

1) Connection with using 24VDC that coming from Control Panel (Recommended)



2) Connection with using internal 24VDC

